

## R E M A R K S

In the present communication, Claims 83, 85, 87, 91, and 93 were amended. No claims were cancelled or added. As such, Claims 83-94 are currently pending. The Examiner's rejections and objections are as follows:

I. The Examiner alleged that the present application is not entitled to the priority date of one or more of the priority applications;

II. The Examiner objected to Claim 85 for containing a typographical error;

III. Claims 83-92 were rejected under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the written description requirement;

IV. Claims 85-87, 91, 93, and 94 were rejected under 35 U.S.C. 112, second paragraph, as allegedly indefinite;

V. Claims 83, 88, and 92 were rejected under 35 U.S.C. 102(b) as allegedly anticipated by Dattagupta (EP0427074);

VI. Claim 83 was rejected under 35 U.S.C. 102(e) as allegedly anticipated by Wenz et al. (U.S. Pat. Pub. 2003/0119004);

VII. Claims 84, 85, and 89 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Dattagupta in view of Dai et al. (Genes & Development, 1998, 12:2782-2790);

VIII. Claims 84-87 and 89-91 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Dattagupta in view of Kazmierczak et al. (WO 02/095002); and

IX. Claims 83-94 were provisionally rejected on the ground of obviousness-type double patenting as being unpatentable over Claims 108, 111, 112, 119, and 127 of copending Application No. 10/744,815.

### **I. Claim of Priority**

The Examiner alleged that the present application is not entitled to the priority date of one or more of the priority applications (Office Action, page 2). The Examiner notes that "the issue of priority is moot in view of the new art applied above (Dattagupta), which predates

Applicant's earliest possible effective filing date of May 22, 2001." (Office Action, pages 15-16).

Applicants disagree that the present application is not entitled to the priority date of the priority applications as explained in the previous Response (herein incorporated by reference). Moreover, while this issue may be moot with respect to Dattagupta reference, this issue is not moot with respect to the Wenz et al. reference. However, as noted below, the claims have been amended, for example, by specifying a certain type of RNA polymerase not taught by Wenz et al. As such, it is also now moot with respect to Wenz et al.

## **II. Typographical Error in Claim 85**

The Examiner objected to Claim 85 for reciting "on a said target nucleic acid" rather than "on said target nucleic acid." Applicants have corrected this typographical error.

## **III. Written Description Rejection of Claims 83-92**

The Examiner rejected Claims 83-92 under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the written description requirement (Office Action, page 4). In particular, the Examiner alleged that Claim 83 does not have support for reciting an "RNA polymerase" without specifying that the RNA polymerase "lacks helicase-like activity and can transcribe RNA using a single-stranded promoter." (Office Action, page 4). Applicants disagree with this rejection. Nonetheless, to further the prosecution of the present application, without acquiescing to the Examiner's rejection, while reserving the right to prosecute the original claims in the future, Applicants have amended Claim 83 as suggested by the Examiner by specifying that the RNA polymerase "lacks helicase-like activity and can transcribe RNA using a single-stranded promoter." As such, Applicants submit that this rejection should be withdrawn.

## **IV. Indefiniteness Rejection**

The Examiner rejected Claims 85-87, 91, 93, and 94 under 35 U.S.C. 112, second paragraph, as allegedly indefinite (Office Action, page 5).

With respect to Claim 85, the Examiner alleged that "said first oligonucleotide" in step (b)(ii) and "said RNA polymerase" in steps (c) and (d) lack antecedent basis. Applicants submit

that this was a typographical error. Claim 85 has been amended to specify a first probe oligonucleotide and an N4 virion RNA polymerase. As such, Applicants submit that this rejection should be withdrawn.

With respect to Claims 87 and 91, the Examiner alleged that the use of the phrase "such as" renders these claims indefinite. Applicants disagree. Nonetheless, to further the prosecution of the present application, without acquiescing to the Examiner's rejection, while reserving the right to prosecute the original claims in the future, Applicants have amended Claims 87 and 91 to remove the portions of the claims that begin with "such as."

With respect to Claim 93, the Examiner alleged that "said oligonucleotide" and "said RNA polymerase" lack antecedent basis. Applicants submit that this was a typographical error. Claim 93 has been amended to specify a single-stranded DNA oligonucleotide and an N4 virion RNA polymerase. As such, Applicants submit that this rejection should be withdrawn.

#### **V. Anticipation Rejection Over Dattagupta**

The Examiner rejected Claims 83, 88, and 92 under 35 U.S.C. 102(b) as allegedly anticipated by Dattagupta (EP0427074) (Office Action, page 6). Applicants disagree with this rejection and submit that it is moot in view of the amendments to Claim 83. In particular, as discussed above, Claim 83 has been amended to recite that the RNA polymerase lacks helicase-like activity and can transcribe RNA using a single-stranded promoter. Dattagupta does not teach the use of such RNA polymerases. As such, Applicants submit that the Dattagupta reference does not anticipate Claims 83, 88, and 92, and therefore this rejection should be withdrawn.

#### **VI. Anticipation Rejection Over Wenz et al.**

The Examiner rejected Claim 83 under 35 U.S.C. 102(e) as allegedly anticipated by Wenz et al. (U.S. Pat. Pub. 2003/0119004) (Office Action, page 7). As noted in the previous Response, Applicants submit that the Wenz et al. reference is not prior art as it has a filing date of December 5, 2001, while the present claims have a priority date of May 22, 2001. However, as indicated above, this issue is moot as Claim 83 has been amended to recite the use of an RNA polymerase that lacks helicase-like activity that can transcribe RNA using a single-stranded

promoter. The Wenz et al. reference does not teach the use of such RNA polymerases. As such, Applicants submit that the Wenz et al. reference does not anticipate Claim 83, and therefore, this rejection should be withdrawn.

## **VII. Obviousness Rejection Over Dattagupta in View of Dai et al.**

The Examiner rejected Claims 84, 85, and 89 under 35 U.S.C. 103(a) as allegedly unpatentable over Dattagupta in view of Dai et al. (*Genes & Development*, 1998, 12:2782-2790) (Office Action, page 9). Applicants respectfully disagree with this rejection. Nonetheless, to further the prosecution of the present application, without acquiescing to the Examiner's rejection, while reserving the right to prosecute the original claims in the future, Applicants have amended Claim 83 to specify that "at least one of said two or more oligonucleotides comprises a single-stranded promoter that does not anneal to said target nucleic acid." Support for this amendment is found throughout the specification including, for example, Figure 18.

Applicants submit that this amendment to the claims highlights the lack of obviousness of the amended claims. For example, the Examiner's stated motivation to combine Dattagupta and Dai et al. is based on the double-stranded nature of the promoter in Dattagupta and that the N4 virion RNA polymerase in Dai et al. can be made to use such a double stranded promoter in the presence of *E. coli* single-stranded binding protein. As the amended claims recite the use of a single-stranded promoter, Applicants submit that there is no suggestion or motivation to combine these references as alleged by the Examiner. As such, Applicants submit that this rejection should be withdrawn.

## **VIII. Obviousness Rejection Over Dattagupta in View of Kazmierczak et al.**

The Examiner rejected Claims 84-87 and 89-91 under 35 U.S.C. 103(a) as allegedly unpatentable over Dattagupta in view of Kazmierczak et al. (WO 02/095002) (Office Action, page 11). The Examiner notes that Applicants may be able to remove the Kazmierczak et al. reference as prior art using a number of different procedures. While Applicants reserve the right to rely on such procedures, it is submitted that such procedures are not necessary. In particular, it is noted that the Kazmierczak et al. reference and priority application 10/153,219 contain the same disclosure and therefore, Kazmierczak et al. is not prior art. For example, both

Kazmierczak et al. were filed on the same day (May 22, 2002), contain the same claims, the same Examples, the same Figure descriptions, the same background, the same disclosure in the Figures, the same sequence listing, etc. As such, Applicants respectfully submit that this rejection should be withdrawn.

#### **IX. Provisional Double-Patenting Rejection**

The Examiner provisionally rejected Claims 83-94 on the ground of obviousness-type double patenting as being unpatentable over Claims 108, 111, 112, 119, and 127 of copending Application No. 10/744,815. Applicants will consider filing a terminal disclaimer upon allowance of the claims in the present application.

#### **CONCLUSION**

Should the Examiner believe that a telephone interview would aid in the prosecution of this application, Applicants encourage the Examiner to call the undersigned at 608-218-6900.

Dated: October 23, 2008

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